

Amendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Previously presented) An apparatus for forming a glue profile for gluing at least one of a bottom sheet and a folded bottom of a tube portion which is used for forming a block bottom bag, comprising:

at least one first glue reservoir from which a glue is supplied;

glue lines which transport the supplied glue;

a plurality of glue valves configured to open and close individually so as to control flow of the transported glue, the glue profile being definable based on selective opening of the glue valves;

glue outputs which are allocated to the glue valves and from which the glue is communicated so as to provide the glue profile;

a second glue reservoir which communicates with at least two of the glue valves, the second glue reservoir being configured as four glue subreservoirs each including therein a gas cushion; and

a third glue reservoir configured as two glue subreservoirs disposed downstream of the first glue reservoir and upstream of the second glue reservoir and configured to supply the glue to

the second glue reservoir in a pressurized state, the glue in the third glue reservoir being under a higher pressure than the glue in the second glue reservoir.

Claim 2 (Withdrawn): Apparatus according to claim 2, characterized in that the pressure reservoir (103) comprises a compressible medium - preferably a gas such as air - which is under pressure.

3-4. (Canceled)

5. (Currently amended) The apparatus according to claim 1, further comprising a pressure regulator disposed in the glue line that connects the second glue reservoir and the third glue reservoir to one another.

6. (Previously presented) The apparatus according to claim 5, wherein the pressure regulator includes a valve configured to open and close a connection between the second glue reservoir and the third glue reservoir, the valve having an opening time and a closing time each being less than 5 ms.

7. (Previously presented) The apparatus according to claim 1, further comprising at least one pump provided between the first glue reservoir and the third glue reservoir and configured to

deliver the glue into the third glue reservoir in the pressurized state.

8. (Previously presented) The apparatus according to claim 1, wherein the third glue reservoir communicates with a pressure reservoir.

9. (Previously presented) The apparatus according to claim 1, wherein the third glue reservoir includes a plurality of glue pressure levels connected in series.

10. (Previously presented) The apparatus according to claim 1, further comprising at least one depressurization valve in communication with the second glue reservoir and configured to reduce the glue pressure in the second glue reservoir.

11. (Previously presented) The apparatus according to claim 10, wherein the depressurization valve depressurizes the second glue reservoir to atmospheric pressure.

12. (Previously presented) The apparatus according to claim 1, further comprising a glue discharge system configured to discharge the glue from the second glue reservoir without the glue passing through the glue valves.

13. (Previously presented) The apparatus according to claim 12, wherein the glue discharge system is a glue recirculation line that conveys the glue from the second glue reservoir to the first glue reservoir.

14. (Previously presented) The apparatus according to claim 1, further comprising a pressure meter provided with at least one of the second glue reservoir and the third glue reservoir.

Claim 15 (Withdrawn): Apparatus according to claim 2, characterized in that the at least one second glue reservoir is provided with an additional supply and/or drain (119) through which a cleaning medium like water or compressed air can be conducted.

16. (Previously presented) The apparatus according to claim 1, further comprising at least one of (i) a glue discharge line and vessel and (ii) a cleaning medium discharge line and vessel in communication with the second glue reservoir.

17. (Previously presented) The apparatus according to claim 1, wherein the first glue reservoir includes a glue agitator in which components of a starch glue are placed and stirred to provide the starch glue.

18-19. (Canceled)

20. (Previously presented) An apparatus for forming a glue profile for gluing at least one of a bottom sheet and a folded bottom of a tube portion which is used to form a block bottom bag, comprising:

a first glue reservoir from which a glue is supplied;
glue lines to transport the supplied glue;
a plurality of glue valves configured to open and close individually so as to control flow of the transported glue, the glue profile being defined by selective opening of the glue valves;

glue outputs allocated to the glue valves, from which the glue is communicated so as to provide the glue profile;

a second glue reservoir in communication with at least two of the glue valves, the second glue reservoir being configured as four glue subreservoirs each including therein a gas cushion;

a pump that elevates a pressure of the glue from a first glue reservoir pressure to an elevated pressure; and

a third glue reservoir configured as two glue subreservoirs disposed downstream of the first glue reservoir and upstream of the second glue reservoir, the third glue reservoir containing the glue at the elevated pressure for delivery to the second glue reservoir, and the elevated glue pressure being higher than a glue pressure in the second glue reservoir.

21. (Previously presented) The apparatus according to claim 20, further comprising a pressure regulator located in the glue line between the third glue reservoir and the second glue reservoir.

22. (Canceled)

23. (Currently amended) An apparatus for forming a glue profile for gluing at least one of a bottom sheet and a folded bottom of a tube portion which is used for forming a block bottom bag, comprising:

at least one first glue reservoir from which a glue is supplied;

glue lines which transport the supplied glue;

a plurality of glue valves configured to open and close individually so as to control flow of the transported glue, the glue profile being definable based on selective opening of the glue valves;

glue outputs which are allocated to the glue valves and from which the glue is communicated so as to provide the glue profile;

a second glue reservoir which communicates with at least two of the glue valves, the second glue reservoir being configured as four glue subreservoirs each including therein a gas cushion;

a third glue reservoir configured as two glue subreservoirs disposed downstream of the first glue reservoir and upstream of

the second glue reservoir and configured to supply the glue to the second glue reservoir in a pressurized state, the glue in the third glue reservoir being under a ~~higher pressure than the glue in the second glue reservoir~~ first pressure and the glue in the second glue reservoir being under a second pressure, the first pressure being higher than the second pressure; and

a pressure regulator being disposed in each of the glue lines between the third glue reservoir and the second glue reservoir.

24. (Currently amended) The apparatus according to claim 23, wherein the pressure regulator reduces the first pressure in the glue line to the second pressure of the second glue reservoir.

25. (New) An apparatus for forming a glue profile for gluing at least one of a bottom sheet and a folded bottom of a tube portion which is used for forming a block bottom bag, comprising:

at least one first glue reservoir from which a glue is supplied;

glue lines which transport the supplied glue;

a plurality of glue valves configured to open and close individually so as to control flow of the transported glue, the glue profile being definable based on selective opening of the glue valves;

glue outputs which are allocated to the glue valves and from which the glue is communicated so as to provide the glue profile; a second glue reservoir which communicates with at least two of the plurality of glue valves that are selectively opened, the plurality of glue valves being disposed downstream of the second glue reservoir, and the second glue reservoir being configured as four glue subreservoirs each including therein a gas cushion; and a third glue reservoir configured as two glue subreservoirs disposed downstream of the first glue reservoir and upstream of the second glue reservoir and configured to supply the glue to the second glue reservoir in a pressurized state, the glue in the third glue reservoir being under a higher pressure than the glue in the second glue reservoir.

26. (New) An apparatus for forming a glue profile for gluing at least one of a bottom sheet and a folded bottom of a tube portion which is used for forming a block bottom bag, comprising:

at least one first glue reservoir from which a glue is supplied;

glue lines which transport the supplied glue;

a plurality of glue valves configured to open and close individually so as to control flow of the transported glue, the glue profile being definable based on selective opening of the glue valves;

glue outputs which are allocated to the glue valves and from which the glue is communicated so as to provide the glue profile;

a second glue reservoir which communicates with at least two of the plurality of glue valves that are selectively opened, the plurality of glue valves being disposed downstream of the second glue reservoir, and the second glue reservoir being configured as four glue subreservoirs each including therein a gas cushion;

a third glue reservoir configured as two glue subreservoirs disposed downstream of the first glue reservoir and upstream of the second glue reservoir and configured to supply the glue to the second glue reservoir in a pressurized state, the glue in the third glue reservoir being under a higher pressure than the glue in the second glue reservoir; and

a glue discharge system configured to discharge the glue from the second glue reservoir without the glue passing through the glue valves, the glue discharge system being a glue recirculation line that conveys the glue from the second glue reservoir to the first glue reservoir.